

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,647	08/28/2001	Shigeru Umehara	N99147USDIV	5529
21254	7590 04/19/2005		EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD			ALANKO, ANITA KAREN	
SUITE 200	JOHN MOODE ROLLE		ART UNIT	PAPER NUMBER
VIENNA, VA 22182-3817			1765	
			DATE MAILED: 04/19/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental	
Notice of Allowability	/

Application No.	. Applicant(s)		
09/939,647	UMEHARA, SHIGERU		
Examiner	Art Unit		
Anita K. Alanko	1765		

Notice of Allowability	Examiner	Art Unit	
	Anita K. Alanko	1765	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI- of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due	ed course. THIS
1. X This communication is responsive to 12/30/04 letter.	•		
2. ☑ The allowed claim(s) is/are <u>16-23 and 25-34</u> .			
3. The drawings filed on <u>28 August 2001</u> are accepted by the	Examiner.		
4. Acknowledgment is made of a claim for foreign priority un a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" on the delow. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give comply including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date	been received. been received in Application No cuments have been received in this is of this communication to file a reply ENT of this application. itted. Note the attached EXAMINER' es reason(s) why the oath or declarate the submitted. on's Patent Drawing Review (PTO-	complying with the red S AMENDMENT or Nation is deficient.	quirements
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the			: back) of
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I 	sit of BIOLOGICAL MATERIAL n FOR THE DEPOSIT OF BIOLOGICA	nust be submitted. I AL MATERIAL.	Note the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 8/28/01,3/12/0212/30/0 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☐ Examiner's Amendr 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), e nent/Comment	
-			



Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: the prior art fails to teach or suggest a method for manufacturing an ink jet recording head, comprising

forming a pressure generating chamber from a chamber plate with a pair of sides such that said pair of sides comprises a plurality of arcuate portions; and

forming an ink supply plate on a side of said chamber plate, said ink supply plate comprising an ink outlet passage comprising an upper passageway and a lower passage way which is displaced in a downstream direction from said upper passageway, as in the context of claim 16.

The prior art also fails to teach or suggest a method for manufacturing an ink jet recording head comprising:

forming a pressure generating chamber from a chamber plate with a pair of sides such that said pair of sides comprises a plurality of arcuate portions, said plurality of arcuate portions comprise an upper arcuate portion and a lower arcuate portion;

forming a vibrating plate on said chamber plate, said vibrating plate forming an upper surface of said pressure generating chamber; and

forming an ink supply plate on a side of said chamber plate which is opposite to said vibrating plate, said ink supply plate forming a lower surface of said pressure generating chamber, as in the context of claim 25.

The closest prior art, Momose et al (EP 652108 A2), does not teach forming an ink supply plate with the cited ink outlet passage as in claim 16, nor an ink supply plate formed on a side of a chamber plate opposite to said vibrating plate, said ink supply plate forming a lower

surface of said pressure generating chamber, as in the context of claim 25. Momose does not have a separate ink supply plate, rather the ink supply is in the pressure generating chamber plate, therefore there is no motivation to provide an extra step of forming an ink supply plate on a side of said chamber plate which is opposite to said vibrating plate, said ink supply plate forming a lower surface of said pressure generating chamber, as in the context of claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K. Alanko whose telephone number is 571-272-1458. The examiner can normally be reached on Mon-Fri until 2:30 pm (Wed until 11:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/939,647

Art Unit: 1765

Page 4

Anita K. Hanko

Anita K Alanko Primary Examiner Art Unit 1765